



# Fisheries and Aquatics Bulletin

(Fisheries and Aquatic Resources (FAR) Program)

**Fisheries and Aquatics Bulletin (FAB) is an electronic info-journal designed to distribute and exchange information about the USGS's Fisheries and Aquatic Resources Program to interested scientists and managers throughout the Bureau.**

## From the Program Coordinators Desk

### **Farewell to FAB Editor**

Farewell and Many Thanks to Emily Tracy, the pioneering editor of FAB! Emily is leaving BRD Headquarters and headed out to the Mid-Lands to pursue a graduate degree at the University of Missouri in Columbia. Emily was instrumental in the start-up of FAB and has worked tirelessly with many of you in collecting fisheries and aquatic resources information to insure professional quality FAB publications. Emily and her talents will be sorely missed here in the Fisheries and Aquatic Resources Program. However, we wish her the very best with her new educational endeavors in Columbia, where she will also have the opportunity to work with Dr. Michael Mac and his staff at CERC. Emily, Thanks Again and Best Wishes!!

### **Welcome New FAB Editor**

Debbie Barthello, Fisheries and Aquatic Resources secretary, has agreed to step up to the plate as the new Editor of FAB. Debbie is relatively new to BRD, but she is a veteran USGS employee with experience in three of the Bureaus' four disciplines. As the former director of the USGS Visitors Center, Debbie brings extensive experience in outreach programs. Please welcome Debbie as the new FAB Editor and send her your science accomplishments, articles of interest and other FAR related factoids to be published in FAB. Please contact Debbie at (703)648-6551, e-mail [dmbarth@usgs.gov](mailto:dmbarth@usgs.gov)  
Welcome Editor Debbie!

Thanks,  
Jim Preacher  
FAR Program Coordin



## In's & Ou

**Denny Fenn** - Associate Director for Biology, is heading to his new assignment to establish the Southwest Biological Science Center, Flagstaff, AZ.

## **After 7 Hearings, House Resources Committee Reauthorizes Comprehensive Fisheries Act, 23-17**

The House Resources Committee reauthorized a newly-strengthened Magnuson-Stevens Act that will take strong steps to conserve ocean wildlife, particularly declining species. The committee passed the bill 23-17, taking the first step toward reauthorizing the act for the first time since 1996. This vote comes on the heels of seven hearings held by the Subcommittee on Fisheries, Conservation, Wildlife and Oceans to review proposed changes to an act that is the primary law for fishery resources and fishing activities in federal waters. The bill steps up fisheries conservation efforts while phasing-out foreign fishing activities close to the U.S. coastline. Provisions of the act include information on data collection, ecosystem-based fisheries management and essential fish habitat.

## **Committee Approves ESA Reforms that Require Federal Agencies to Use Proven Science, Peer Review in Major ESA Decisions**

The House Resources Committee passed H.R. 4840, a bill to reform the Endangered Species Act, by a vote of 22-18. The bill, The Sound Science for the Endangered Species Act Planning Act of 2002, requires the federal government to rely on field-tested and empirical data in making major decisions under the Endangered Species Act, including the listing of species and determinations regarding critical habitat. Similarly, the bill establishes a higher scientific threshold for petitioners wishing to list a species. There must be clear and convincing evidence the species is in peril. The bill requires that science used in major ESA decisions be peer-reviewed by a panel of scientists. Finally, the bill requires the federal government to take into account the impact of an ESA mandate on the economy of a region. [For more information: http://resourcescommittee.house.gov](http://resourcescommittee.house.gov)



## Fisheries and Aquatic Resources Related Meetings, Workshops, and Seminars



Aug 18-22  
132nd American Fisheries Society  
Annual Meeting  
Baltimore, MD  
Contact: [bfritz@fisheries.org](mailto:bfritz@fisheries.org)



Sept. 17-21  
International Association of Fish  
and Wildlife Agencies (IAFWA)  
Annual Meeting—Celebrating 100  
years of service!  
Big Sky, Montana  
[www.iafwa.org](http://www.iafwa.org)

### Upper Midwest Environmental Science Center: Fishery Chemical Study

The USGS is involved in a unique project to develop data on chemicals to meet U.S. Food and Drug Administration (FDA) registration requirements for treating fish diseases. Fish hatcheries are restricted in treating fish diseases because there are very few approved fishery drugs and chemicals. Hydrogen peroxide, for example is a promising chemical for treating fungal infections on fish and fish eggs, but it has not met all the FDA requirements. In response to a FDA request for more data on the chemical, USGS scientist Jeff Rach is working with the Missouri Department of Natural Resources to conduct hydrogen peroxide treatments on fungused channel catfish eggs. (Jeff Rach, 608-891-6322)

### Alaska Science Center:

#### New Tagging Technology Aiding Fishery Research

Satellite pop-up tags have been successfully implemented on Pacific halibut in the Gulf of Alaska. Data from seven tags were recovered by remote transmission through the ARGOS satellite system and two tags were recovered in the commercial fishery. The pop-up satellite archival tag proved to be an efficient tool for identifying critical marine habitat by examining daily and seasonal habits for Pacific halibut in the northern Gulf of Alaska. These tags allowed determination of the timing and extent of vertical and horizontal migration as well as temperature and depth preferences of halibut. The data from these tags suggests population substructure for spawning locations in the Gulf of Alaska and the ASC plans to extend the study of halibut to the Bering Sea in 2002 in collaboration with the International Pacific Halibut Commission. The extended study will test alternative hypotheses of discrete sub-population structure for this species on spawning and summer feeding grounds throughout its range in Alaska.

Archival tags are being used to investigate critical marine habitat and movement patterns in coho salmon smolts in Cook Inlet and steelhead kelts on the Kenai Peninsula. The steelhead study is part of the Sloan Foundation's Census of Marine Life project. In 2002, USGS scientists surgically implanted 250 state-of-the-art small electronic tags that store up to 2.5 years of *in situ* data on pressure (depth), temperature (both inside and outside of the animal), and light (i.e. geolocation estimates) using microcomputers and sensor arrays. Both study sites have weirs that allow recovery of the tag from the fish after marine migrations. Data from these tags will allow the center to monitor behavior, seasonal movements, and physiology of the fish independent of any fishery. These data will be used by the State of Alaska and others to address practical fisheries management problems in marine environments, understand the impacts of climatic and oceanographic shifts on fish distributions, define critical habitat for marine salmonids, and improve fishery management for critical commercial species.

### Leaping Asian Carp!

Mike Mac, Director of CERC just sent over a short but interesting video (E-Mail) of Asian (Bighead) Carp in the upper Mississippi River. The video, taken by Dr. John Chick of the Illinois Natural History Survey, depicts an abundance of carp leaping out of the river as a motor boat speeds along. The video certainly adds to the arsenal of concerns about this invasive species. If you would like to see this video, please contact Debbie Barthello or me and we will forward an e-mail copy.



Photo courtesy Mikhail Blikstein

## In the NEWS (E&E Publishing)

### **Listing for coastal cutthroat trout not needed, FWS says** April Reese, Land Letter editor

The U.S Fish and Wildlife Service has decided not to list the coastal cutthroat trout as a threatened species in southwestern Washington and the lower Columbia River basin, marking the second time in three weeks the agency has rejected listing a population of cutthroat trout. In 1999, FWS and the National Marine Fisheries Service proposed listing the coastal cutthroat trout because of suspected declines in numbers, habitat loss and the effects of hatchery fish on wild cutthroat. Recently FWS said new data on coastal cutthroat trout in southwestern Washington and a reanalysis of data already collected suggested that the population is more abundant than biologists initially thought. Furthermore, new protections for the fish and its habitat, most notably three large habitat conservation plans on state and private timberlands and changes in Washington's forest practices regulations make federal protection under the Endangered Species Act unnecessary, the agency said in announcing the decision June 26.

### **Biologists take new steps to restore fish to ancestral waters** David Binder, New York Times

Biologists are attempting to restore sturgeon to their ancient habitat in Wisconsin's Lake Winnebago and its tributaries, in the hope that the Winnebago stocks can be used to rehabilitate the fish in all five Great Lakes. Wisconsin's 99-year old restrictions on fish at the lake have made it the most viable alternative worldwide for the sturgeon's restoration. University of Ferrara biologists in Italy are using fin tissue from Winnebago to help their genetic studies aimed at restoring the endangered Adriatic sturgeon in the Po River. And experts on the Chesapeake Bay and the Tennessee River are looking to Winnebago for help in rehabilitating their sturgeon populations. Wisconsin Department of Natural Resources are netting and releasing sturgeon at a variety of sites in order to develop a template for Lake Michigan. A rehabilitation effort has been proposed that will stretch from Manitowoc all the way down to the Illinois-Indiana border.

### **Snakeheads found in Maryland Pond**

Multiple News Sources

Earlier this month, Maryland Department of Natural Resources officials caught approximately 100 juvenile snakeheads, apparently the offspring of two adult snakeheads a local resident placed in a Crofton, Maryland pond over two years ago. The two Northern Snakehead fish were obtained by the resident from a New York supermarket. Known for their flavor and curative properties the resident obtained the fish to add to a stew for his ailing sister. By the time the fish arrived, his sister was well, and the man dumped the fish in the pond when they became too large for his aquarium. Since then, the snakehead population skyrocketed. This sharp-toothed fish has no known predators and can eat almost everything in sight, including cannibalizing themselves. The snakehead is native to the Yangtze River in China and can survive on land for up to three days to allow it time to infiltrate another pond or river. This raised fears that it could decimate the state's native species therefore stronger measures have been considered to rid the pond of the fish, including draining, poisoning, or shocking the pond. A panel of scientists encouraged the DNR to act as quickly as possible before the snakeheads migrate to the Little Patuxent River, 75 yards away. If the DNR approves the two-step process, biologists could soon begin spraying glyphosate, the herbicide marketed as Roundup, on floating vegetation and pump dibromide or 2,4-D (common herbicides) into the pond to kill the underwater plants. The plants will begin turning brown within a few days and die off within a week or two, killing native fish as the oxygen drains from the pond. Biologists will then pour rotenone into the pond, starting from the edges, to kill all remaining fish. As the fish rise to the top, crews will be positioned in boats to net them and cull the snakeheads and landfill the others. At the same time, Interior Secretary Gale Norton proposed to add 28 species of snakehead fish to the list of injurious species. Designation would prohibit the importation of the fish anywhere in the U.S. as well as make it illegal to transport it across state lines.



**FAB NEEDS YOUR INPUT:** I'm off to graduate school, so this is my last issue as editor of FAB. Thanks for all your support, articles, and suggestions in the development and publication of FAB. Best Regards, Emily